Customer No. 00027683 Atty. Dkt. No. 36689.259

## 1. AMENDMENTS TO THE CLAIMS (LISTING OF CLAIMS):

This listing of claims will replace all prior versions and listings of claims in the application:

- 1. (Currently Amended) An isolated polynucleotide expression vector comprising, in 5' to 3' order:
  - (a) an HSV LAT enhancer element that consists essentially of a contiguous nucleotide sequence from about nucleotide 118,975 to about nucleotide 120,471 of SEQ ID NO:109, SEQ ID NO:110, or SEQ ID NO:111;
  - (b) a first isolated HSV LAT insulator/boundary region that consists essentially of a contiguous nucleotide sequence from about nucleotide 8365 to about nucleotide 9273 of SEQ ID NO:109, SEQ ID NO:110, or SEQ ID NO:111, operably positioned upstream5' of a first nucleic acid segment comprising a selected gene of interest operably linked to a first promoter that expresses the gene in a selected host cellthe LAT enhancer element; and
  - (be) a second <u>isolated HSV</u> LAT insulatory/boundary region that consists essentially of a contiguous nucleotide sequence from about nucleotide 120,208 to about nucleotide 120,940 of SEQ ID NO:109, SEQ ID NO:110, or SEQ ID NO:111, operably positioned <u>downstream3'</u> of the <u>LAT enhancer elementfirst nucleic acid segment</u>.

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- 2-8. (Canceled)
- 9. (Currently Amended) The isolated polynucleotideexpression vector of claim 1, further comprising: (d) at least a first promoter region operably positioned upstream of the LAT enhancer element, and downstream of the first LAT insulator/boundary region (c) a first enhancer operably linked to the nucleic acid segment.
- 10. (Currently Amended) The isolated polynucleotide expression vector of claim 9, wherein the first promoter regionenhancer comprises an isolated HSV LAP1 promoterLAT enhancer.

## 11-13.(Canceled)

- 14. (Currently Amended) The isolated polynucleotide expression vector of claim [[9]]1. wherein the first promoter region comprises an isolated HSV LAP1 promoter that consists essentially of a sequence region of from about nucleotide 117,938 to about 118,843 of any one of SEQ ID NO:109, SEQ ID NO:110, and SEO ID NO:111.
- 15. (Currently Amended) The isolated polynucleotide expression vector of claim 14, wherein the first promoter region comprises an isolated HSV LAP1 promoter that consists essentially of a sequence region of from about nucleotide 117,938 to about 118,843 of any one of SEQ ID NO:109, SEQ ID NO:110, and SEQ ID NO:111.

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16-26.(Canceled)

27. (Currently Amended) The isolated polynucleotide expression vector of claim 1, wherein the nucleic acid segment further comprising comprises at least a first multiple cloning region operably positioned downstream 3' of the first promoter LAT insulator/boundary region and upstream of the LAT enhancer element isolated HSV LAP.

28. (Canceled)

- 29. (Currently Amended) The isolated polynucleotideexpression vector of claim 27, wherein the nucleic acid segment further comprising comprises at least a second multiple cloning region operably positioned upstream 5' of the first promoter second LAT insulator/boundary region and downstream of the LAT enhancer element.
- 30. (Currently Amended) The isolated polynucleotide expression vector of claim 29, wherein the second multiple cloning region further comprises at least a first nucleic acid sequence polynucleotide that encodes a first therapeutic agent.
- 31. (Currently Amended) The isolated polynucleotide expression vector of claim 30, wherein the second multiple cloning region further comprises a nucleic acid sequence that encodes at least a first therapeutic agent is selected from the group consisting of a peptide, a

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polypeptide, a ribozyme, a catalytic RNA molecule, an antisense oligonucleotide, and an antisense polynucleotide.

32-45. (Canceled)

- (Currently Amended) A viral vector virus, virion, or plurality of viral particles that 46. comprises the isolated polynucleotide expression vector of claim 1 or claim 73.
- 47. (Currently Amended) The viral vector virus, virion, or plurality of viral particles of claim 46, wherein the vectorvirus, virion, or plurality of viral particles is of retroviral, adenoviral, adeno-associated viral, or herpes viral origin.
- 48. (Currently Amended) The viral vector virus, virion, or plurality of viral particles of claim 47, comprising a gutless HSV vector, a gutless AV vector, a gutless AAV vector, a recombinant HSV vector, a recombinant AV vector, or a recombinant AAV vector.

49-50.(Canceled)

- 51. (Currently Amended) An isolated mammalian host cell that comprises:
  - (a) the isolated-polynucleotide expression vector of claim 1 or claim 73; or
  - (b) a viral vector, virion, or plurality of viral particles that comprises the isolated polynucleotide of claim 1 or claim 73 expression vector.

## 52-53. (Canceled)

- 54. (Currently Amended) A pharmaceutical composition comprising:
  - (a) the isolated polynucleotide expression vector of claim 1 or claim 73; or
  - (b) a viral vector, virion, or plurality of viral particles that comprises the isolated polynucleotide of claim 1 or claim 73 expression vector.

## 55-71. (Canceled)

- 72. (Currently Amended) A recombinant viral vector comprising the isolated polynucleotideexpression vector of claim 1.
- 73. (Currently Amended) An isolated polynucleotide expression vector that comprises, in 5' to 3' order:
  - (a) an HSV LAT enhancer element, consisting of a contiguous nucleotide sequence from about nucleotide 118,975 to about nucleotide 120,471 of any one of SEQ ID NO:109, SEQ ID NO:110, and SEQ ID NO:111;
  - (b) a first LAT insulator/boundary region, consisting of a contiguous nucleotide sequence from about nucleotide 8365 to about nucleotide 9273 of any one of SEQ ID NO:109, SEQ ID NO:110, and SEQ ID NO:111, operably positioned upstream of the LAT enhancer element; and

(c) a second LAT insulatory/boundary region, consisting of a contiguous nucleotide sequence from about nucleotide 120,208 to about nucleotide 120,940 of any one of SEQ ID NO:109, SEQ ID NO:110, and SEQ ID NO:111, operably positioned downstream of the LAT enhancer element.

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- a first isolated HSV LAT insulator/boundary region that consists

  essentially of a contiguous nucleotide sequence from about nucleotide

  8365 to about nucleotide 9273 of SEQ ID NO:109, SEQ ID NO:110, or

  SEQ ID NO:111;
- (b) a first nucleic acid segment comprising a first multiple cloning region

  operably linked to a first nucleic acid segment comprising a first selected

  gene of interest operably linked to a first promoter that expresses the first

  gene of interest in a selected host cell;
- wherein the enhancer element consists essentially of a contiguous nucleotide sequence from about nucleotide 118,975 to about nucleotide 120,471 of SEQ ID NO:109, SEQ ID NO:110, or SEQ ID NO:111;
- (d) a second nucleic acid segment comprising a second multiple cloning

  region operably linked to a second nucleic acid segment comprising a

  second selected gene of interest operably linked to a second promoter that

  expresses the second gene of interest in a selected host cell; and
- (e) a second isolated HSV LAT insulatory/boundary region that consists

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essentially of a contiguous nucleotide sequence from about nucleotide about nucleotide 120,940 of SEQ ID NO:109, 120,208 to SEQ ID NO:110, or SEQ ID NO:111.

- 74. (Currently Amended) The isolated polynucleotide expression vector of claim 73, further comprising a first promoter region operably positioned upstream of the LAT enhancer element, and downstream of the first LAT insulator/boundary region wherein the first enhancer element comprises an HSV LAT enhancer element.
- 75. (Currently Amended) The isolated polynucleotide expression vector of claim 74, wherein the first or the second promoter region consists of a sequence region of from about nucleotide 117,938 to about 118,843 of any one of SEQ ID NO:109, SEQ ID NO:110, and SEQ ID NO:111 comprises an HSV LAP1 promoter.
- 76. (New) The expression vector of claim 73, wherein the first or the second gene of interest encodes a first therapeutic agent.
- (New) The expression vector of claim 76, wherein the first therapeutic is selected from the 77. group consisting of a peptide, a polypeptide, a ribozyme, a catalytic RNA molecule, an antisense oligonucleotide, and an antisense polynucleotide.